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REMARKS

The Office action dated October 18, 2005, and the references cited have been fully considered. In response, please consider the following remarks. Reconsideration and/or further prosecution of the application is respectfully requested. Also, Applicants request the specification be amended as presented *supra*. No new matter is added herein.

In regards to the amendment to the specification, Applicants have taken this opportunity to cleanup a definition in the specification to be consistent with common usage. The term "computer-readable medium" is updated to ensure it complies with standard usage in the art, and the specification is amended herein to clarify the description of computer-readable medium in accordance with the MPEP. No new matter is added in this paper.

Next, Applicants request the Office consider the two Information Disclosure Statements timely and properly filed in this matter pursuant to 37 CFR §§ 1.97 and 1.98. Applicants further request the Office return an initialed, signed and dated copies of the corresponding 1449's indicating due consideration of each cited reference. The first eIDS was filed on September 22, 2005, and the second IDS was filed on October 5, 2005, both of which were filed before the October 18, 2005, mailing of a first Office action. In fact, the file history of the present application shows the Office performed a prior art search on October 12, 2005, which is a week after the submission of the second, later filed, IDS, so Applicants believe the Office had ample time to consider the properly filed IDS's.

In terms of the claim rejections, all original claims 1-20 stand rejected under 35 USC § 102(e) as being anticipated by Ichiriu et al., US Patent 6,597,595. Applicants respectfully traverse all rejections as the prior art of record, alone or in combination, neither teaches nor suggests all the limitations recited in any claim.

It is well-established law that the burden is on the Office to initially present a *prima facie* unpatentability (e.g., anticipation, obvious) rejection, before Applicant has any burden of proof of disproving any application of a cited reference against a claim. *In re Warner*, 379 F2d. 1011, 1016, 154 USPA 173, 177 (C.C.P.A. 1967); Ex *parte Skinner*, 2 USPQ2d 1788, 1788-89

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(B.P.A.I. 1986). The MPEP and law is clear that for anticipation, the reference *must teach each and every aspect of the claimed invention* either explicitly or impliedly, and the burden is on the Office to present a *prima facie* case of anticipation. MPEP § 706.02 (emphasis added). Inherent means it *must* occur. The fact that a certain result or characteristic *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. MPEP § 2112 (*emphasis in original*). In order to meet these burden, the Office must at least present a rejection for each and every claim limitation, with these limitations being construed in light of the specification; all of *the presented rejections for a claim must be used in a consistent and as a whole cohere* (e.g., including the application of the cited art to a dependent claim be consistently applied to its independent claim); and the application of the reference(s) *must teach the claim limitation to which it is/they are applied.*

Applicants respectfully traverse all claim rejections as the prior art of record neither teaches nor suggests all the recited limitations of any claim, including the limitation of the skip condition as recited in each of the independent claims. Applicants believe the original claims were patentably drafted around such art as Ichiriu et al.

In a nutshell and referring to the limitations of claim 1, the merging mechanism identifies a winning entry from matching entries that match the lookup word as identified in the associative memory bank. Each associative memory entry is identified as being associated with a skip or a no-skip condition and a particular group of multiple groups of entries. If the active entry is matched and is the highest priority matching entry within the particular group, then the result of whether or not the any entry in the for the group of entries depends on whether it is associated with a skip or no-skip condition. If it associated with a skip condition then the particular group is skipped.

In contrast, Ichiriu et al. teaches that the validity bits are used to prevent a match signal assertion for those rows of CAM cells (i.e., for a CAM entry), and a "no match" is signaled for the CAM entry having reset validity bits (i.e., the skip bit indicating "skip" or the empty bit indicating "empty" as applied in the Office action) regardless of whether or not the CAM entry

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matches the comparand (i.e., lookup word). Col. 8, lines 13-22. Therefore, there is no way for a CAM entry associated with a skip condition (as presented in the Office action) to be identified as a matching entry by the CAM array (corresponding to the associative memory bank as applied in the Office action) as correspondingly recited in claim 1. Also, therefore, there is no way that the highest priority matching entry of the particular group (which is identified from the matching entries) is associated with a skip condition as recited in claim 1 (as a matching entry cannot be associated with the skip condition as interpreted by the Office). For at least these reasons, the prior art of record neither teaches nor suggests all the recited limitations of claim 1. Moreover, each of the independent claims recite a similar limitation, therefore all pending claims are allowable over the prior art of record. Applicants respectfully request all rejections be withdrawn and the application be passed to issuance.

Applicants have successfully traversed the rejection of each and every claim, and therefore, Applicants have no further burden of proof of disproving any application of a cited reference against any claim. However, to further prosecution of this application, Applicants will make some further observations.

First, claims 13 and 19 stand rejected as being anticipated by Ichiriu et al., yet the Office states on page 13 that the reference fails to disclose a recited limitation. Therefore, the anticipation rejection of these claims is facially not proper. Moreover, the generalized statement that "[h]ardware and software are logically equivalent" is not proper for a § 103 rejection per MPEP § 2143.01, which requires a "specific understanding or principle within the knowledge of the skilled artisan" citing the controlling Federal Circuit precedent of *In re Kotzab.*

Properly understanding the reference, Ichiriu et al. combines a basic content addressable lookup mechanism (comparand register 115, CAM array 101, flag 112, priority encoder 114 to produce an indication of whether or not an entry matched 176 and index 174 of the highest priority matching entry 174), with error correction and detection circuitry (error CAM 715, error detection circuit 711). The MPEP requires the Office action to present a rejection that is coherent. However, the Office takes statements in Ichiriu et al. out of context and combines

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them with other statements, apparently because they use similar words. Applicants request the Office apply what the reference teaches.

For example, further in regards to the stated rejection of claim 1, the Office relies on a statement "[a]ny order of significance may be assigned to the row, segment and block addresses in alternative embodiments" from col. 20, lines 56-58 which means that you can traverse the CAM array in different orders when doing error checking of all the entries in the CAM array Yet, the Office action applies this teaching to a lookup operation, and thus the statement of rejection is non sequitur. Next, the application of Ichiriu et al.'s use of groups in FIG. 6 to the recited claim limitations is non sequitur. FIG. 6 illustrates an error detector 107 which determines parity on subsets (i.e., "groups" of bits) of a CAM entry retrieved from CAM array. Ichiriu et al.'s use of groups nor error detector 107 has nothing to do with identifying the winning entry, i.e., including whether or not the particular group is skipped as recited in claim 1. These same comments apply to the rejections of the other independent claims (5, 9, 11, 13, 15, 17, 19) in which the Office action inappropriately convolutes the lookup function and error detection functions of Ichiriu et al.

Further, in regards to claims 2 and 6, the Ichiriu et al..'s use of a FIFO has nothing to do with the ordered sequence of the ordered plurality of groups introduced in their respective independent claims. Thus, the statement of rejection is non sequitur. Further, in regards to claims 3 and 7, access control lists are well known in the art, and Applicants have no idea of what the Office is trying to state. Moreover, it makes no sense that each of multiple subsets of bits of a CAM entry correspond to different access control lists, and Applicants make a demand for evidence how Ichiriu et al. would work in such a manner as a lookup word is compared to entries, and the statement of rejection in the Office action would require the value normally stored in a single entry to be stored across the same subset of bits of multiple entries of Ichiriu et al. Further in regards to claims 4, 8, 10, 12, 14, 16, 18, and 20, the limitation requires the merging mechanism to perform such operation and skipped entries are prohibited by Ichiriu et al. from being in "said matching entries" as discussed *supra*.

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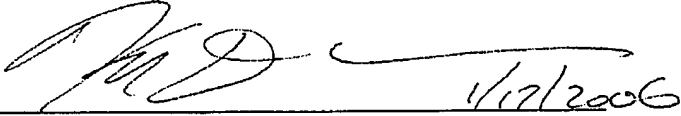In re NGAI ET AL., Application No. 10/691,401
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Final Remarks. Applicants believe no extension of time is required. Should an extension of time be deemed appropriate, Applicants hereby petition for such deemed extension of time. Applicants further authorize the charging of Deposit Account No. 501430 for any fees that may be due in connection with this paper (e.g., claim fees, extension of time fees).

In view of the above remarks and for at least the reasons presented herein, all pending claims are believed to be allowable over all prior art of record, the application is considered in good and proper form for allowance, and the Office is respectfully requested to issue a timely Notice of allowance in this case. Applicant requests any and all rejections and/or objections be withdrawn. If, in the opinion of the Office, a telephone conference would expedite the prosecution of the subject application, the Office is invited to call the undersigned attorney, as Applicants are open to discussing, considering, and resolving issues.

Respectfully submitted,
The Law Office of Kirk D. Williams

Date: January 17, 2006

By _____ 1/17/2006

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